

EPA Manhole Sanitary Sewer Gas Sampling Results
Former 277 Fairchild Drive, Mountain View, CA
Middlefield-Ellis-Whisman (MEW) Superfund Study Area

						TCE	PCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	1,1-DCA	1,1-DCE	Chloroform
All units in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)													
Manhole (MH) ID/Location	Sample Date	Sample Time	Analytical Laboratory	Sample Method	Sample Duration								
F6-010	5/7/2020	10:50	Entanglement	AROMA	Grab	1790	--	--	--	--	--	--	--
	5/7/2020	15:15	Entanglement	AROMA	Grab	1897 J	--	--	--	--	--	--	--
	5/8/2020-5/11/2020	19:55/18:20	EPA R9	RAD130	3 days	470	24	130	8.5	NA	7.1	7.1	54
MH1	5/6/2020	15:17	EPA R9	TO15	Grab	300	7 C1, J	100	8	9	8	10	90
	5/7/2020	11:02	Entanglement	AROMA	Grab	364	--	--	--	--	--	--	--
	5/7/2020	15:01:20	Entanglement	AROMA	Grab	636	--	--	--	--	--	--	--
	5/8/2020-5/11/2020	17:55/16:15	EPA R9	RAD130	3 days	1300	55	330	20	NA	14	15	65
MH2	5/7/2020*	12:56*	EPA R9	HAPSITE®	Grab	7.7 C1, J	ND<14	--	--	--	--	--	--
	5/7/2020	14:47	Entanglement	AROMA	Grab	448	--	--	--	--	--	--	--
	5/8/2020	15:38	EPA R9	TO15	Grab	60	ND<10	20	ND<8	ND<5	ND<8	ND<8	10
	5/8/2020*	13:02*	EPA R9	HAPSITE®	Grab	480 C2, Q7, J	19 Q7, J	--	--	--	--	--	--
MH3	5/6/2020	13:46	EPA R9	TO15	Grab	300	8 C1, J	100	7 C1, J	7	7 C1, J	10	100
	5/6/2020	16:05	Entanglement	AROMA	Grab	450	--	--	--	--	--	--	--
	5/7/2020	11:27	Entanglement	AROMA	Grab	3.52	--	--	--	--	--	--	--
	5/7/2020*	14:42*	EPA R9	HAPSITE®	Grab	200 C2, J	ND<14	--	--	--	--	--	--
	5/8/2020*	13:53*	EPA R9	HAPSITE®	Grab	100	ND<14	--	--	--	--	--	--
	5/8/2020	15:30	EPA R9	TO15	Grab	20	ND<10	5 C1, J	ND<8	ND<5	ND<8	ND<8	ND<8
MH4	5/6/2020	15:08	EPA R9	TO15	Grab	6 C1, J	ND<10	ND<8	ND<8	ND<5	ND<8	ND<8	40
	5/7/2020	9:22	Entanglement	AROMA	Grab	ND<0.2	--	--	--	--	--	--	--
	5/8/2020*	14:05*	EPA R9	HAPSITE®	Grab	12	ND<14	--	--	--	--	--	--
MH5	5/6/2020	14:56	EPA R9	TO15	Grab	8 C1, J	ND<10	ND<8	ND<8	ND<5	ND<8	ND<8	10
	5/7/2020	9:33	Entanglement	AROMA	Grab	ND<0.2	--	--	--	--	--	--	--

Notes:

- TO15 results calculated based on Temperature of 25 degrees Celsius at 1 atmosphere
- Passive Sorbent Sampler (Radiello® [RAD 130]) - Uptake rates average field temperatures when provided.

- Sample identification with "-#d" indicates number of days (sampling duration for longer-term sampler).

*Sample Date and Time are the time of TCE air sample screening analysis

Acronyms:

TCE = Trichloroethene; PCE = Tetrachloroethene; cis-1,2-DCE = cis-1,2-Dichloroethene; trans-1,2-DCE = trans-1,2-dichloroethene; 1,1-DCA = 1,1-dichloroethane; 1,1-DCE = 1,1-dichloroethene

AROMA = Autonomous Rugged Optical Multigas Analyzer for onsite TCE screening analysis

Entanglement = Entanglement Technologies

EPA R9 = EPA Region 9 Laboratory / Field Analytical Support Program (FASP) GC/MS screening analysis (HAPSITE®)

HAPSITE® = Hazardous Air Pollutants on Site screening analysis by gas chromatograph/mass spectrometer

bgs = below ground surface; ft = feet; MH = Manhole; SS = Sanitary Sewer

ND = Not Detected, denotes result was below laboratory quantitation limit

NA or "--" = Not Analyzed

C1 = The reported concentration for this analyte is below the quantitation limit

C2 = The reported concentration for this analyte is above the calibration range

J = The reported result is an estimate

Q7 = Surrogate spike recoveries for this sample were outside control limits

EPA Sewer Cleanout Gas Sampling Results
Former 277 Fairchild Drive, Mountain View, CA
Middlefield-Ellis-Whisman (MEW) Superfund Study Area

							TCE	PCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	1,1-DCA	1,1-DCE	Chloroform
All units in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)														
Sewer Cleanout Location	Sample Identification	Sample Date	Sample Time	Analytical Laboratory	Sample Method	Sample Duration								
SF1	SF1-SC	5/7/2020*	9:32*	EPA R9	HAPSITE®	Grab	0.7 C1, J	ND<1.4	--	--	--	--	--	
SF2	SF2-SC	5/7/2020*	8:54*	EPA R9	HAPSITE®	Grab	0.9 C1, J	ND<1.4	--	--	--	--	--	
SF3	SF3-SC	5/7/2020*	9:06*	EPA R9	HAPSITE®	Grab	0.6 C1, J	ND<1.4	--	--	--	--	--	
SF4	SF4-SC	5/7/2020*	9:19*	EPA R9	HAPSITE®	Grab	ND<1.1	ND<1.4	--	--	--	--	--	
C5	C5-SC	5/6/2020*	14:57*	EPA R9	HAPSITE®	Grab	3.0	ND<1.4	--	--	--	--	--	
C6	C6-SC	5/6/2020*	15:10*	EPA R9	HAPSITE®	Grab	2.3	ND<1.4	--	--	--	--	--	
C7	C7-SC	5/6/2020*	15:22*	EPA R9	HAPSITE®	Grab	2.3	ND<1.4	--	--	--	--	--	
D08	D08 cleanout	5/7/2020	9:44	Entanglement	AROMA	Grab	ND<0.2	--	--	--	--	--	--	
D09	D09 cleanout	5/7/2020	9:55	Entanglement	AROMA	Grab	20.62	--	--	--	--	--	--	
	D9-SC	5/8/2020*	11:53*	EPA R9	HAPSITE®	Grab	130 C2, J	4.6	--	--	--	--	--	
	D9-SC	5/8/2020*	15:09*	EPA R9	HAPSITE®	Grab	48 Q7, J	ND<14	--	--	--	--	--	
	D9-SC	5/8/2020*	16:10*	EPA R9	HAPSITE®	Grab	14	ND<14	--	--	--	--	--	
	D9-SC-050820	5/8/2020	16:25	EPA R9	TO15	Grab	10	ND<10	ND<8	ND<5	ND<8	ND<8	ND<10	
D10	D9-SC-1ft-3d	5/8/2020-5/11/2020	18:28/15:53	EPA R9	RAD130	3 days	0.87	ND<0.41	0.24 C1, J	ND<0.39	NA	ND<0.39	ND<0.32	
	D10 cleanout	5/7/2020	10:10	Entanglement	AROMA	Grab	22.76	--	--	--	--	--	--	
	D10-SC	5/8/2020*	11:38*	EPA R9	HAPSITE®	Grab	20	ND<14	--	--	--	--	--	
	D10-SC-050820	5/8/2020	16:35	EPA R9	TO15	Grab	7 C1, J	ND<10	ND<8	ND<8	ND<5	ND<8	ND<10	
	D10-SC	5/8/2020*	17:15*	EPA R9	HAPSITE®	Grab	83 C2, J	2.8	--	--	--	--	--	
D11	D10-SC-1 ft-3d	5/8/2020-5/11/2020	18:34/15:50	EPA R9	RAD130	3 days	25	1.1	0.39	0.50	NA	0.39	0.36	
	D11 cleanout	5/7/2020	10:22	Entanglement	AROMA	Grab	10.61	--	--	--	--	--	--	
	D11-SC	5/8/2020*	12:37*	EPA R9	HAPSITE®	Grab	29	ND<14	--	--	--	--	--	
	D11-SC	5/8/2020*	15:35*	EPA R9	HAPSITE®	Grab	14	ND<2.7	--	--	--	--	--	
	D11-SC	5/8/2020*	16:36*	EPA R9	HAPSITE®	Grab	320 C2, J	15	--	--	--	--	--	
D11-SC-6 inch-3d			5/8/2020-5/11/2020	18:05/15:40	EPA R9	RAD130	3 days	ND<0.35	ND<0.41	ND<0.39	ND<0.38	NA	ND<0.38	ND<0.32
D12	D12 cleanout	5/7/2020	10:36	Entanglement	AROMA	Grab	0.32	--	--	--	--	--	--	--
E13	E13-SC	5/7/2020*	12:03*	EPA R9	HAPSITE®	Grab	8.2	0.7 C1, J	--	--	--	--	--	--
E14	E14 sewer cleanout	5/7/2020	14:20	Entanglement	AROMA	Grab	851 J	--	--	--	--	--	--	--
	E14 cleanout	5/7/2020	16:03	Entanglement	AROMA	Grab	34.38	--	--	--	--	--	--	--
	E14 cleanout	5/7/2020	16:14	Entanglement	AROMA	Grab	611.8	--	--	--	--	--	--	--
	E14 cleanout	5/7/2020	16:24	Entanglement	AROMA	Grab	783.18	--	--	--	--	--	--	--
	E14 cleanout	5/7/2020	16:34	Entanglement	AROMA	Grab	381.96	--	--	--	--	--	--	--
	E14 cleanout	5/7/2020	16:45	Entanglement	AROMA	Grab	28.54	--	--	--	--	--	--	--
	E14 cleanout	5/7/2020	16:55	Entanglement	AROMA	Grab	1.02	--	--	--	--	--	--	--
	E14 cleanout	5/7/2020	17:06	Entanglement	AROMA	Grab	150.7	--	--	--	--	--	--	--
	E14-SC	5/7/2020*	12:17*	EPA R9	HAPSITE®	Grab	3.3	ND<1.4	--	--	--	--	--	--
	E14-SC	5/8/2020*	10:07*	EPA R9	HAPSITE®	Grab	890 C2, J	21	--	--	--	--	--	--
E15	E14-SC-1 ft-3d	5/8/2020-5/11/2020	17:39/17:02	EPA R9	RAD130	3 days	140	7.6	47	3.1	NA	2.4	2.4	9.8
	E15 cleanout	5/6/2020	12:32	Entanglement	AROMA	Grab	0.19	--	--	--	--	--	--	--
	E15 sewer cleanout	5/7/2020	14:30	Entanglement	AROMA	Grab	0.55	--	--	--	--	--	--	--
	E16	E16 cleanout	5/6/2020	12:45	Entanglement	AROMA	Grab	2.87	--	--	--	--	--	--
	E17	E17 cleanout	5/6/2020	12:54	Entanglement	AROMA	Grab	2.84	--	--	--	--	--	--
E18	E18 cleanout	5/6/2020	13:04	Entanglement	AROMA	Grab	0.76	--	--	--	--	--	--	--
E19	E19 cleanout	5/6/2020	13:14	Entanglement	AROMA	Grab	2.62	--	--	--	--	--	--	--
F20	F20-SC	5/7/2020*	10:26*	EPA R9	HAPSITE®	Grab	370	ND<140	--	--	--	--	--	--
F21	F21-SC	5/7/2020*	10:37*	EPA R9	HAPSITE®	Grab	490	ND<140	--	--	--	--	--	--
F22	F22 cleanout	5/6/2020	14:19	Entanglement	AROMA	Grab	1906 J	--	--	--	--	--	--	--
	F22 cleanout	5/7/2020	13:13	Entanglement	AROMA	Grab	5.18	--	--	--	--	--	--	--
	F22 cleanout	5/7/2020	15:53	Entanglement	AROMA	Grab	4.67	--	--	--	--	--	--	--
	F22-SC	5/8/2020*	10:32*	EPA R9	HAPSITE®	Grab	12 C2, J	ND<1.4	--	--	--	--	--	--
F23	F23 cleanout	5/6/2020	13:24	Entanglement	AROMA	Grab	1630 J	--	--	--	--	--	--	--
	F23 cleanout	5/6/2020	13:34	Entanglement	AROMA	Grab	685	--	--	--	--	--	--	--
	277 Fairchild-F23-SC-PP	5/6/2020	13:58	EPA R9	TO15	Grab	60	ND<10	10	ND<8	ND<5	ND<8	ND<8	30
	F23 cleanout	5/7/2020	12:56	Entanglement	AROMA	Grab	5.78	--	--	--	--	--	--	--
	F23 cleanout	5/7/2020	15:40	Entanglement	AROMA	Grab	0.06 C1	--	--	--	--	--	--	--
	F23 cleanout	5/7/2020	17:16	Entanglement	AROMA	Grab	553	--	--	--	--	--	--	--
	F23 cleanout	5/7/2020	17:28	Entanglement	AROMA	Grab	75.14	--	--	--	--	--	--	--
	F23-SC	5/8/2020*	10:56*	EPA R9	HAPSITE®	Grab	1 C1, J	ND<1.4	--	--	--	--	--	--
F23-SC-1 ft-3d			5/8/2020-5/11/2020	17:30/16:54	EPA R9	<								